

The University of Chicago

THE CONCEPT OF ETERNITY

A PART OF A DISSERTATION SUBMITTED TO
THE FACULTY OF THE DIVINITY SCHOOL IN
CANDIDACY FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

JUNE, 1942

By
GRACE EDITH CAIRNS

CHICAGO, ILLINOIS

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CHAPTER I

SUMMARY OF ARGUMENT AND CONCLUSION

In this our final chapter we shall attempt to summarize and state more concisely the argument we have followed at length in this thesis. Then we shall briefly suggest what implications our concept of eternity may have for a Christian philosophy of religion.

In our study of typical definitions of eternity we found that these were of two main types: (1) those which defined eternity as a realm of essence, and (2) those which defined eternity as a Substance. Since Plato is the spiritual father of the concept of eternity as a realm of essence, we began our study with an account of his definition of the concept. Plato defines eternal reality as a world of Ideas or Forms. The Ideas are abstract relational patterns fixed in nature. They are immutable, eternal, absolute, indivisible, and visible only to mind (nous). These eternal constants make science and rational discourse possible. But we found that there were some difficulties in Plato's view which he himself sets forth in the Parmenides. The major difficulty is the problem of how particulars participate in the Ideas or universals, for each particular must partake of the whole idea or of only part of it; but it must be the whole idea and not part of it because the Ideas are indivisible. In this case, then, if several particulars simultaneously participate in the same indivisible idea a contradiction arises, for if the ideas are indivisible, how can more than one particular simultaneously contain the idea? This difficulty arises, however, because Plato did not make sufficiently clear the dichotomy between the realm of essence and the realm of matter or existence. Santayana, Plato's spiritual successor does make clear this dichotomy and thus avoids Plato's major difficulties.

Santayana's definition of eternity is similar to that of Plato. The eternal is the realm of essence. An essence is a universal and such a universal is an object of sense or of thought given immediately, i.e., through intuition. It is eternal, indi-

visible, complete, and without external relations. Essences are patterns of relations infinite in number. They are in so sense temporal-spatial entities. Therefore, the same indivisible essence can be embodied in any number of particular existents. Santayana thus avoids Plato's major difficulty. Nevertheless, there are new difficulties in the account which Santayana gives of the realm of essence. Santayana claims that the realm of essence has reality apart from this or any other existential world. But here we disagree with his view, for Santayana's realm of essence is really a realm of possibility and possibility does not have even logical meaning apart from actuality. Morris Cohen makes this clear in his philosophical system.

Morris Cohen maintains that the principle of polarity is fundamental in the universe and in logical thought which attempts to comprehend the universe. The realm of essence or possibility, for example, has no meaning apart from the realm of existence or actuality. The fundamental absolute opposites, in terms of which all others and indeed all reality can be understood, are matter and form. Form has neither meaning nor reality apart from matter, nor matter apart from form. Existence consists of concrete individuals composed of both matter and form. Each individual, besides having a formal structure of its own which is its substance or essence, is the intersection of innumerable relations or universals which bind it to various other formal systems. This is the principle of sufficient reason upon which the sciences are based. It states that "everything is connected in definite ways with definite other things, so that its full nature is not revealed except by its position and relations within a system."¹ The various formal systems which comprehend these relations are the sciences. The sciences themselves have a common relational sub-structure, for they are all based on the general principles of formal logic. The general principles of formal logic, therefore, are the invariant general laws of all determinate being, actual or possible. Such general principles upon which scientific systematization is based are the laws of identity, contradiction, excluded middle, and other equally fundamental principles of logic.

However, existence is not exhausted by rationality, i.e.,

¹Morris R. Cohen, Reason and Nature (New York: Harcourt Brace & Company, 1931), p. 150.

its logical structure. Matter or discrete individuality, which depends upon matter, is a principle of indeterminacy, contingency, or irrationality in the world. There will, therefore, always be existential reality which cannot be comprehended in a logical system. Even if this were not the case, a thorough-going panlogism would be self-defeating, for rationality has meaning only in distinction from irrationality. Matter, then, is as ultimate in the universe as form, and can never be dissolved into form either actually (for however far back science pushes its quest into causes, it must always come upon a certain ultimate given distribution of particles which is contingent) or theoretically, as we saw in our discussion of Bradley's concept of eternity. The formal element of being is the eternal and the material element the temporal, for forms or universals are logical entities repeatable in any number of actual material existences. The particulars change and perish constantly; only the pattern, the formal or structural elements of things and events are eternal. Eternity, Cohen says, is thus a "category of meaning" while time is a "category of existence," for temporal existence consists of individuals composed of perishable matter as well as form. Cohen's fuller definition of eternity is the following:

Complete nature cannot reveal or exhibit itself in any moment or interval of time as far as that moment excludes other moments. But in so far as the meaning and content of each here and now necessarily involves some essence or character that is more than merely here and now, we have a point of view in which the whole of time is included. The point of view to which the whole of time and space has a meaning may be called the eternal (as distinct from the everlasting, which applies to what endures in time and space).¹

The criticisms which might be brought against Cohen's definition by the apparently fluent character of existence, by probability theories in the sciences, or by the theory of relativity, we found invalid. We then set forth at length the criticism of the philosophical school of pragmatism as represented by Dewey and found it, also, invalid. The criticism of absolute idealism which claims that Cohen does not go far enough and therefore his view is only partially true, we found to be theoretically better grounded. Moreover, the idealists' concept of eternity as an absolute Substance is one of the major definitions of the concept in the history of philosophy. We were thus brought to the con-

¹Ibid., p. 155.

sideration of the concept of the eternal as a Substance.

The rational proofs that the eternal is a substantial being begin with Aristotle. Aristotle, of course, did not hold the idealists' view, viz., that the eternal substance is the only reality, for, like Cohen, he holds also to the reality of matter. However, his concept of the eternal substance is basic to the understanding of Spinoza's and the other modern idealists' concepts. Aristotle defines substance as a thing composed of form and matter, and the form is the essence or nature of the thing. However, God is a substance in which there is no matter, and therefore God is an eternal substance. Aristotle offers two main proofs for this view: (1) the argument from motion, and (2) the argument from the nature of potentiality and actuality (or possibility and necessity) both of which are cosmological arguments. The argument from motion, viz., that motion must have an unmoved cause and this cause must be eternal because motion is everlasting is not a valid one today. There is no reason why a material system cannot have its source of motion within itself. The argument from the nature of potentiality and actuality, or possibility and necessity, is a better one and is still used in modern philosophy. It states that every existent entity in the world is not in itself necessary. There would be no contradiction in its non-existence. However, if all existence were merely possible and not necessary, there is no reason why there should be an existing world. There must be a first and necessary cause, then, the essence of which is pure actuality and not possibility or potentiality. Since such a purely actual being can have no element of potentiality, or matter, it must be pure form. It is, then, an eternal substance, for only those substances composed of matter as well as form are perishable. This eternal substance must be a thinking substance. Its life consists in a thinking on thinking, i.e., in beholding forms apart from their matter. Aristotle at times identifies human reason (nous) with this eternal substance because human reason also is able to behold forms, i.e., universals apart from their matter.

Aristotle's second argument though better than the first, is also not conclusive as it is stated, for the material world need not have a first cause; matter and motion may be everlasting. Stated somewhat differently, however, there is truth in this argument. It is true that formal, logical structure is essential

to determinate existence and is thus a cause of such existence, yet not identical with it, for these logical entities are separable and exemplified by many different individual existents. In this sense, then, it is true that logical substance is a necessary cause of being.

Spinoza attempts to make Aristotle's dual principles, matter and form, parallel aspects, among others, of one substance. Only one substance can exist and this, then, is eternal. Eternity is defined as "existence itself in so far as it is conceived to follow necessarily from the definition of the eternal thing."¹ The eternal thing which alone has real and full existence is substance defined as "that which is in itself and is conceived through itself; in other words, that, the conception of which does not need the conception of another thing from which it must be formed."²

Spinoza gives two main arguments for the existence of the eternal substance: (1) an ontological argument, and (2) a cosmological argument. The ontological argument states that we have a clear and adequate idea of God, a being self-caused, infinite, and eternal. This idea could not be derived from our finite sense-experience or from imagination, but only from our intellect. Our intellect can have this idea because it is part of God's substance, i.e., of the infinite intellect which is an attribute of God. God thus makes himself known through himself. This argument cannot be proved beyond doubt except through scientific method, for often our ideas do not correspond with the ideas or forms exemplified in nature. However, an experiment to prove the reality of such an infinite substance would be impossible. Nevertheless, it is true that scientific method itself presupposes that reason in man is identical in a sense with the rational forms in nature, for man is capable of formulating logical systems of propositions the consequences of which are often found to be true through direct, experimental observation of nature. Therefore, we have good reason to believe that nature does exemplify logical forms which the intellect of man can comprehend, but we do not have any evidence that this logical structure is all-inclusive of reality, for it seems that irrationality or contingency is also

¹Spinoza, Ethics in Spinoza, Selections, ed. by John Wild (New York: Charles Scribner's Sons, 1930), Part I, Def. VIII.

²Ibid., Part I, Def. III.

real. Spinoza's cosmological argument follows the same pattern as Aristotle's which we have already considered.

If substance is as Spinoza defines it, there can, of course, be but one substance. Spinoza says that the creation of another substance from the substance which is the necessary cause of existence is impossible, because the substance created would have to be created either from the same substance or from nothing. Creation from nothing is impossible. Then the created substance must be created from the same substance, but if it is, then its attributes or affections must be identical with the prior substance, and therefore, it would be identical with the prior substance, i.e., the same substance, and not a different one. There can be, then, but one substance, and because this is true, substance is infinite, for there is nothing to limit it. This infinity of substance shows itself positively in its infinite creative power which it expresses in an infinite number of attributes of which we know only two, extension and thought, i.e., matter and form. There is, however, an identical isomorphic logical structure which underlies all the attributes. Thus eternity is, for Spinoza, one infinite Substance which manifests itself concretely in an infinite number of attributes.

The finite modes of substance, i.e., particular thoughts and particular bodies constitute the determinations of the concrete manifestations of the infinite attributes of thought and extension. These finite modes, which to our finite point of view appear to have only a temporal duration, are the essential concrete aspects of a logical and not a temporal sequence, and are, as essential elements of this logical order, eternal. Finite and temporal modes, then, taken as such are unreal. The eternal Substance is the only reality.

Leibniz, however, thinks that Spinoza does not sufficiently account for the existence of finite modes. Individual finite existences seem to be very real and to be separate substantial entities to a far greater degree than Spinoza's system could allow since Spinoza maintains that substance is one and indivisible. Leibniz points out that this indivisible substance is apparently divided in the finite modes. Leibniz then proceeds to account for these finite substances. His answer to the problem is that God created these separate substances out of nothing. These substances and God their creator are eternal. This, however, is

frankly a supernatural explanation for the existence of finite modes and not a real answer to the problem of their origin, but it is the only answer which can be given to the problem if a special creation theory of finite substances is maintained. Moreover, in Leibniz's system the nature of the separate substances is so rigidly determined that they are really not separate substances, but objectifications of God's ideas and of God's activity; for the predicates of each separate substance have been determined by God in the beginning. This is the famous pre-established harmony. Space, time, and motion are also ultimately unreal. This, too, makes of God the only real substance. There are, of course, further difficulties in Leibniz's system which we have pointed out in detail in our chapter dealing with his view. Leibniz, then, cannot successfully account for the existence of finite modes or substances, but, on the contrary, his theory of such substances brings us to the conclusion that there can be but one real substance. His better arguments for the existence of this one real substance, God, do not contribute anything of value to the cosmological and ontological arguments. Besides a cosmological and an ontological argument Leibniz introduces two new arguments, the argument from the eternal truths and the argument from the pre-established harmony both of which we found invalid as rational proofs for the existence of God, the eternal substance.

Hegel attempts to explain the existence of finite modes in still another way. He maintains that they are necessary manifestations of the eternal substance. For Hegel as for Spinoza the eternal is one logical, all-inclusive whole, i.e., one infinite substance which becomes determinate, or concrete, in the discrete finite individual existences manifested in the world. Spinoza, however, does not give a precise account of what the nature of the logical process is which makes finite existences essential. Hegel does attempt to describe this process. It is his thesis that this process is a dynamic dialectical one of thesis, antithesis, and synthesis, the synthesis giving rise to another antithesis and another synthesis ad infinitum. Pure Being, for example, as a logical category is not different from its opposite non-being or nothing; only determinate being, marked by beginning and ceasing or being and non-being, which is the synthesis of the two is real. Or, to take another example, the category of subject can have no meaning apart from the category of object. Reality, therefore,

illustrates a process of subject, or abstract thought, positing its antithesis, the object, material nature and its finite existences; and then returning to itself as the synthesis of the two, the one concrete Individual, or eternal substance, enriched by the whole content of finite determinate being. We can agree with Hegel that the logical process does illustrate an opposition of polar categories, the One and the Many, Subject and Object, Positive and Negative, Being and Non-Being, Internal Relations and External Relations, Form and Matter; but a synthesis of opposites in which they are unified into one whole is, we think, impossible, for such a synthesis confuses and nullifies logical distinctions. To say that the positive contains the negative because it has no meaning apart from the negative does not mean that the positive and the negative are one, yet this is what Hegel maintains. Furthermore, scientific method does not proceed according to Hegel's logic, nor does history. But this is far from asserting that scientific method and history have no logical pattern. Scientific method depends upon the theory that there are logical patterns in nature; but its ultimate appeal to brute facts, i.e., to observation of material nature for verification of any theory affirms also the reality of contingency and irrationality. No theory is accepted on grounds of its logical cogency alone. Of course such contingency and irrationality may be merely apparent and due to our ignorance of all the causes. Nevertheless, rationality itself has no logical meaning except in so far as it can be distinguished from irrationality. To make the rational alone real as Hegel does, i.e., to make reality consist of logical relations alone and these relations all internal, so that there can be but one real term or eternal Individual, makes of the one Individual an absolute beyond the rational processes of discursive reason and not an absolute consisting of this process.

Bradley shows that this is the case. When terms dissolve into logical elements or relations, they become unreal; but then so also do the relations, for relations without terms are inconceivable. This makes terms and relations, then, upon which the logical process of discursive reasoning depends, both unreal because self-contradictory. Therefore, discursive reasoning itself is not the essential nature of reality, as Hegel maintains, but reality must be an internal unity, an immediate experience, beyond the categories of thought, but containing them and all other ap-

pearances in one eternal absolute experience.

Such an eternal unity, a One beyond the categories of discursive reason, the mystics claim to experience directly in the emotional ecstasy or the unconscious trance. But we found that the same unconscious trance-state was as vehemently affirmed to be a state of nothingness by the Buddhists, as it was affirmed to be an experience of the eternal Subject, Self, One, Absolute, or God by the Vedantists, Yogins, and those Christian mystics who have experienced this last stage of the ecstasy. Likewise, the emotional stage of ecstasy is an experience of Krishna for the Indian devotee while it is an experience of God or Christ for the Christian mystic. The evidence of psychology, moreover, seems to make it plain that the trance-state, as such, in which eternity or eternal substance is experienced, is suspiciously pathological in character. Much of the phenomena of both the emotional and unconscious stages of ecstasy can be produced by drugs or by dancing and music as in primitive religious practices.¹ Such states of trance unconsciousness or of sheer feeling evidently, then, cannot be relied upon to give us knowledge of eternal reality. Whatever knowledge they give us is merely the knowledge which the mystic has gained from his religious and general social environment. However, mystical noetic feeling of a milder and non-pathological form we found to be justifiable by scientific knowledge itself which points to a vastly richer knowable reality than our present state of knowledge has attained. But mystical experience as such, which purports to be a direct and immediate experience of a state of eternal being beyond all categories of time and space and even beyond all categories of discursive reason does not prove that there is such a state of eternal being. Since all the evidence seems to prove the experience either a kind of hypnotic trance or a state of sheer emotion, it cannot be advanced as proof of the Bradleyan Absolute. Bradley, of course, does not offer mystical experience as a proof, but then neither is Bradley's logical argument that terms dissolve into relations final unless Hegel's basic principle that the rational alone is real is accepted as valid. Scientific method on which our most certain knowledge depends takes terms and relations both as real. A term may be the

¹James H. Leuba, Psychology of Religious Mysticism (New York: Harcourt Brace & Company, 1925), chap. 11.

intersection of innumerable relations, many of which we certainly do not and may never know, but it is not exhausted by these relations. It has particularity as well as universality. At the human level this is most apparent. Every individual is different from every other, and this uniqueness, this separateness, and individuality is explained most consistently by assuming that every existent individual is a combination of matter and form. The material principle is the basis for separateness, for spatial and temporal limitation, while the universal characters are the unifying ones, the relations which the existent has to some or to all others and shares with some or all existents. A term, thus, cannot actually disappear into its relations. Furthermore, as Cohen argues, the rational cannot be taken as alone real if scientific method is to be taken as the method of ascertaining truth, because no matter how far back science is able to push its causal explanations, there always must be some primitive, given distribution of matter which would have to be accepted as a contingent fact. The world of matter upon which terms depend must be taken to be as real as the eternal world of universals or relations. Bradley's denial of the reality of space, time, and matter because they are in theory infinitely divisible and therefore composed of units of nothing confuses potentiality with actuality. Potentially space, time, and matter may be infinitely divisible, but actually they are not. The quantum theory in physics seems to show that matter is not actually infinitely divisible. Any actual division is a division into actual units no matter how small these units may be. Bradley, then, has not given adequate proof that the temporal-material world is unreal and the Eternal or the Absolute the only reality. We cannot, then, accept the Bradleyan concept of eternity, for the temporal appears to be as real as the eternal.

Physics affirms the reality of time and measures it by means of entropy, and history also affirms the reality of time and measures it by the sequence of unique, unrepeatable events, both cosmic and human. Such unique unrepeatable events and existences appear most conspicuously in organic life, especially in human history. We saw that philosophers of history who hold to the cyclical view affirm that the whole series of events is repeated either at definite or at chance intervals, or at least that every cultural history illustrates an identical pattern. We found, however, that neither of these views could be upheld.

The temporal series of events is not identical with a logical sequence. Nevertheless, the temporal sequence does illustrate certain relevant logical identities, laws, or universals which are fairly easy to isolate in physical science, but exceedingly difficult to isolate in the social sciences such as history.

Scientific method, physics, and history, then, all appear to affirm the reality of both the eternal, i.e., the formal structure of things and events, and of the temporal, i.e., of matter and contingency. It appears, then, that the idealists' concept of the eternal as one absolute all-inclusive Individual, or logical Substance, cannot be maintained. Even without reference to scientific method, we saw that the idealists' conception, if consistently followed through, yields the Bradleyan Absolute, an eternal One beyond rational distinctions, so that the mystic in his pathological trance-state would come closer to true knowledge of eternity than the scientist or philosopher.

We conclude, then, that eternity must be conceived as Cohen conceives it, since we found his concept consistent rationally, consistent with scientific method and the presuppositions of scientific method, and found besides that the adverse criticisms of idealism as well as pragmatism are unjustifiable. Eternity is, then, as Cohen says, a category of essence or meaning, opposed to matter which is the realm of temporality and contingency, and of particular existences; for contingency and novelty are real. There is, then, not only the possibility, but the responsibility for human control and creativity. However, human control and creativity depend upon reason in man and reason in nature. Reason in nature is ascertainable in the constant elements, the laws, and formal structures, a few of which man in his short life as scientist has discovered. These constant elements, the laws, forms, and structural patterns and patterns of interaction in nature are repeatable and non-temporal while their matter is perishable, constantly changing, and not repeatable. In other words, relations or universals are non-temporal while their terms, the particular concrete existents which embody them perish. Only the abstract characters of things and events are eternal. However, these abstract characters or meanings are not uninteresting. For example, in history any historical event or epoch can be known by a later generation that did not witness it only through abstract characters, i.e., through meanings; and these meanings of history

are often better realized at a much later date than that of their occurrence, for then their significance can be seen by their relational context in a whole historical epoch. For the meaning of any event is its relative position in a context of relations and does not lie in its temporal position in a temporal sequence, i.e., it must be seen as a relevant factor in the determination of a larger whole.

The total universe, then, and every relation within it, non-human and human, forms a huge complex of meanings--some internally related, as those of each separate science are internally related, and some, in comparison with these, externally related, e.g., the sciences to each other; but all have as their basis a common isomorphic logical structure which makes them all amenable to scientific systematization upon common logical principles. Such a huge complex of meanings united by the same logical structure would be the Absolute, but an Absolute after the fact, i.e., determined in its details by the historical sequence of events in which contingency as well as determination plays a leading part. By this we mean that the order in which certain forms become actualized in existence is to some degree contingent. For example, in the present historical era the type of political organization which will predominate in the near future depends in large measure upon which side is victorious in the war, and this, so far as we can tell, is undetermined, for it depends perhaps upon which side can obtain the greater cooperation and exertion of individuals and groups.

There is, then, an identity of logical structure which holds all individuals and events within limits, including those of history, but the individuals, composed of matter as well as form, the terms of which nature is composed, also have a certain freedom, which at the human level is greatest. The Eternal, the Absolute, as the necessary logical structure without which determine being of any kind would be impossible determines individual existences and events as science proves, but events also determine the final, the concrete Absolute, the meaning of which will not be fully determined until the end of time. This is close to Hegel's view, for Hegel held that the abstract structure of being was eternally identical, but, as such, thin and empty. The rich infinity of logical forms and relations which are implicit in it just as multitudes of theorems are implicit in a few axioms in a geometry,

become explicit in the evolutionary development of all possible relational forms by means of the concrete existents of the temporal world. However, the evolutionary development follows a particular logical pattern in Hegel's theory which we found invalid, as we found invalid also the affirmation that the rational alone is real. Every event, every existent entity has a material as well as a formal basis. Its matter changes and perishes and the concrete event or individual as such also perishes, for its matter is finally dissipated into various and sundry other material events in the constant flux of nature. However, the meaning of the event or of the individual is preserved in so far as it forms a significant part of a larger whole which is its context and ultimately of the whole meaning of the total universe. In other words, the individual as a material substance perishes, but seen sub specie aeternitatis as contributing to the meaning of the whole, he is eternal.

Eternity thus is the whole sum-total of relations which existence will embody throughout the whole of time whether time be finite or infinite. In knowing a fragmentary part of this perhaps infinite relational whole, we do, perhaps, have some knowledge, as Cohen suggests, of the direction of completion, and, therefore, some knowledge of the Absolute whole of meaning. We know perhaps the type of thing it is through what knowledge we have of the general logical structure which pervades all existence; but we cannot know it in its fullness until the end of time when the character or meaning of history both cosmic and human can be known as a whole, and all of the forms which will have become actualized in existence also known. Knowledge of the Absolute in its completeness, then, we cannot know, for we are finite creatures. It would require nothing short of an infinite intellect to comprehend such truth; but at least we can know with ever-increasing fullness, as science progresses, the more general logical structure of the whole which makes the world a cosmos rather than a chaos, and thus makes scientific method and discovery possible.

CHAPTER II

IMPLICATIONS OF THE CONCEPT OF ETERNITY

AS HERE DEFINED FOR A CHRISTIAN

PHILOSOPHY OF RELIGION

Eternity is a character which has been ascribed to God throughout the history of Christian theology both Catholic and Protestant. The definition of eternity which St. Thomas Aquinas uses illustrates this and is a definition accepted generally in more orthodox Christian thought. St. Thomas defines eternity as "the whole and perfect simultaneous possession of interminable life,"¹ a definition which he took over verbally from Boethius. In so far as the definition means the whole and simultaneous knowledge, in essence, of the general character of the world in so far as formal structures and laws are embodied in it, we can accept the definition; but in so far as it means that God is a living existing being, we cannot accept it; for from our point of view, this would make of God a substantial being composed of matter, a being in interaction with other beings, and so merely a concrete particular existent. If we are to posit eternity as the essence of God, we must think of him quite otherwise, as a logical, non-existent Absolute such as we have described in our final definition of eternity, and not as a "living being" in the sense of an existential organic being. God is a reality indeed, and apart from the universal, formal, logical structure which is his essence, existence could not be determinate, and therefore would be impossible. As Spinoza says, without God we can neither be nor be known. Nevertheless, existence can be posited only of concrete particular individuals composed of matter and form, and therefore in themselves temporal and perishable. The eternal is eternal because it does not, as such, exist. It does not exist any more

¹St. Thomas Aquinas, *Summa Theologica*, trans. Fathers of the Dominican Province (New York: Benziger Bros., 1911), Part I, Art. I, Ques. X.

than we can say that mathematical or logical truths exist. Such truths are eternal because they do not exist, and therefore can be exemplified in many different concrete existents which themselves change and perish. God, then, if we wish to identify his essence with eternity, cannot be said to exist or to be a "living being," for he is infinite logical being and not a kind of organism, which is what "living being" would make him out to be. As Christian theology declares, God is not identical with the world. He is not a particular existent in interaction with other such existents. Or, as scholastic philosophy makes plain, Being as Essence is distinct from Being as Existence.¹

However, it is none the less true that this logical Absolute has no reality apart from the concrete existents of the actual world. Form is not real apart from matter. Relations to be real must be exemplified in terms, i.e., in concrete existents. Now this material world of concrete existents, according to orthodox Christian theology, was created ex nihilo. Although this doctrine is the product of imaginative and mythical thought in reference to the origin of the world and has no scientific or rational basis, it is at least a symbol in Christian theology of the mystery of God as infinite, absolute, and eternal over against the temporal and finite world. For the Absolute is the infinite whole of all meanings and relations, possible and actual, logical, aesthetic, and moral, many of which will perhaps never be realized in existence--we do not know--for if science realized its ideal, all things would be necessary and nothing possible. However, there is little hope that any finite mind will ever have such absolute knowledge. Possibility will, therefore, always be meaningful for us, and the Absolute is this infinite whole of meanings both possible and existing, for everything cannot exist at once. For this reason, the Absolute can be looked upon as a Mystery beyond our finite comprehension in its infinitude, because logical meanings, relations, and implications are practically inexhaustible in so far as we know.

However, the Absolute as logical being is impersonal and not a conscious mind in our sense of the term; for consciousness, in so far as we have evidence, is dependent upon a certain functional pattern of matter, the nervous system, and any assertion

¹Thomas Norton Harper, The Metaphysics of the School (3 vols.; London: Macmillan and Company, 1879-84), Vol. I, p. 48.

that there can be any other kind of consciousness independent of such a nervous system can have no scientific basis, but must be a purely speculative hypothesis.

God as Creator is, then, not a pre-existent being who exists apart from the world and creates it ex nihilo. In terms of our concept of the nature of God he is creator and preserver of the world as the formal cause of existence, that without which existence would be impossible, for anything to exist must have some kind of form. However, the material cause is also essential. As far as scientific method and knowledge goes and as far as we can logically conceive it to go, the contingent material factors, the given concrete individual components of reality, are as ultimate as the formal relations. Indeed, we have emphasized that formal relations apart from terms which are related have no meaning. A formal cause apart from a material cause cannot give us any concrete reality, i.e., existence. Creation, or the bringing forth, into concrete existence of new forms in the inorganic and organic worlds, in so far as explanation or description of this process is possible for man, must be left to the special sciences which treat of these matters in as much detail as we have knowledge. The only general statement which we can make in the light of this knowledge is that there are both formal and material factors involved. For example, we know something about the patterns involved in the behavior of physical particles and masses through which spiral nebulae evolve into galaxies. In the science of chemistry the formal relations of the particles or quanta of energy appear to determine the distinctive character of each element which differentiates it from every other element. Indeed, we can even predict the properties which an undiscovered chemical element would have simply by working out its formal structure, for it is this which determines the physical properties or interactions. We are, however, still at a loss to explain how organic matter developed from inorganic. The formal structure of the simplest organism is so complex and the technical difficulties involved in analysis so great that we have so far been unable to unravel the mystery of the organic. However, biology is a very young science, and it is possible that we may yet be successful in unravelling this mystery. As far as we know, the difference between the non-living and the living seems to be dependent upon the formal arrangement of the material components, for the ma-

terial elements themselves, as everyone knows, are identical with those of the inorganic world. It is the new formal pattern which gives rise to the new capacities. It is in this sense that we can say that God "creates" the world. The appearance of this new pattern may have been due to certain cumulative "accidents." Life apparently is a rare phenomenon in the universe, for it requires such peculiar conditions in order to develop at any high level that suitable planets, according to astronomers, are almost accidental phenomena. There is no reason to believe that the universe was "created" in order that man or even life might appear.

God is Preserver of existence in the same way and for the same reason that he is Creator, i.e., existence is impossible without some kind of form. All existence has a common basic logical structure which holds it within certain bounds and makes it amenable to the same common scientific method in ascertaining knowledge. Thus God is Preserver as this underlying common logical structure, and creator in the sense that the logical and aesthetic forms which can be developed from it are limitless. The logical continuity of nature depends upon God as Preserver, as the identical underlying logical structure, while logical discontinuity in nature depends upon God as Creator, i.e., upon the relatively autonomous systems of formal relations which have developed from the underlying logical structure. These relatively autonomous systems are the basis of the separate sciences such as physics, biology, psychology, and sociology.

God is Omnipresent as the formal structure underlying all existence and without which no entity could be actual. It is this omnipresence of logical structure throughout nature which makes knowledge possible.

God is not Omnipotent, however, for he shares his "power" with matter. The power of God consists in the fact that no entity can exist without a form no matter how transient or fleeting it might be. Bare matter cannot exist. It must have form of some kind. In this essential principle of determination lies the power of God. But there cannot be determination without some given matter to be determined, and herein lies the power of matter. The nature of the material components limits the power of form even in human shaping of materials. This truth is illustrated also in physics, for no formal pattern or causal law perfectly describes the given material existent or event with mathematical exactness.

There is always some divergence, however slight, between the material existent or event and the form or pattern of change which science uses to describe it. Power to create the world is shared, then, by matter and form.

In reference to the Omniscience of God or the Absolute, we must say that if this Absolute were a conscious mind, omniscience of a certain kind would be a possibility for it, for just as all the theorems of a geometry are deducible from a few axioms, so might all possible forms and possible combinations of forms which existence might take be deducible from the fundamental, basic logical structure common to all existence, that which makes all existence amenable to scientific method. But in so far as matter with its resulting contingency is also a factor in the historical development of the particular succession of forms which have appeared and which will appear in existence, even omniscience could not predict this succession of forms which is the actual world. All the possibilities in all their enormous complexity might be knowable to an omniscient mind, but which ones are to be actualized in existence would not be knowable. However, we have no evidence that the underlying logical structure in which consists the identity of the universe, is in itself conscious. Only in that segment of the realm of form which is human form is there conscious knowledge. Nevertheless, all knowledge is knowledge of God and all knowledge is, in the sense in which we have explained, in God, though certainly not as in a conscious mind.

We can also speak meaningfully of the Unity, Infinity, Simplicity, and Perfection of God. We have reiterated that there is a certain basic logical structure of nature, represented by the invariant laws of logic or mathematics which enables the same formal method, viz., that of science, to be applied in ascertaining knowledge of reality in all of its major aspects--physical, biological, psychological, and social. This basic, formal, logical structure, common to all the sciences, can be said to be the identity, the unity of logical form, underlying all concrete existence. In this lies the unity and simplicity of God. In the theoretical inexhaustibility of possible forms lies the infinity of God; and because God is thus all-inclusive of all possible form, he can be called Perfect.

Goodness, however, cannot be attributed to God in his essential nature. It is true that the good is a form relevant to

that segment of the realm of essence represented by the human form and human social relations; but this segment of the realm of essence is but a minor portion of it. There is no reason why the whole realm of essence should be interpreted in terms of only one of its components. The good is indeed a real relational form, but only pertinent to human relations. The general order of nature in so far as we have evidence is in itself morally neutral, and for us is often evil as well as good.

Love also is meaningless as applied to God conceived as eternal formal being. As Christianity makes plain, God loved the world in Jesus, that is, in that portion of the realm of form which is human personality. However, in so far as the most intelligent human love may be considered as dependent upon the greatest reason, harmony, and order in social relations, God as the principle of all order can be said to be essential to the most intelligent human manifestations of love.

Beauty can be posited of God as the underlying structure of existence which unifies it, which makes it a cosmos rather than a chaos. However, among particular forms there are many which are ugly as well as many which are beautiful. Those forms which sensitive beings feel as beautiful are objectively so, for pleasing patterns for the eye and ear are founded upon certain rhythmic patterns in physical nature. God is perhaps more accurately called the source of beauty, however, rather than beauty itself, for beauty contains emotion as an essential element, i.e., a kind of wonder and love possible only to material, finite creatures.

These, then, are the attributes of God in his essential, or what theology calls his transcendent nature: eternity, creativity, omnipresence, a certain limited power, infinity, unity, simplicity, and perhaps beauty.

Incarnation

We have been careful to point out throughout this thesis that God or the logical Absolute has no reality apart from the concrete existents of the actual world. Form is not real and has no meaning apart from matter. God is immanent in the world as its general logical structure and as all the forms which have been actualized in existence as dependent upon or following from this general logical structure, just as the many possible games of chess which can be played follow from the few rules or axioms of

the game. Exactly which of the formal possibilities will be realized in existence depends upon the interactions and actions of concrete existents as much as upon the general controlling order (God) without which existence would be impossible. This segment of the realm of form which thus becomes exemplified in material existence can be called God Immanent or Incarnate. God Incarnate as being a certain segment of the realm of form is indeed as the ancient Nicene Creed affirms, God of God, Light of Light (for it is that which makes knowledge, good, and beauty possible), and very God of very God; begotten, not made, in the sense that it is dependent upon the infinite realm of form of which it is a segment; and of one Substance with the Father, i.e., with God Transcendent which includes all possible as well as all actualized forms.

In Christian theology God Incarnate reaches the climax of perfection in Jesus Christ, both God and man, i.e., in idealized human personality.¹ However, we have no reason to flatter ourselves that it was nature's purpose to bring the form of man into being, nor is there any reason to believe that man will exist forever, nor any reason to believe that a form different from, and superior to, man will not supersede him. In so far as we know at present, it is true, nevertheless, that man is the highest actualized form in nature, the only form in which God knows himself, at least in essence, and the only form in which love, beauty, and the good are made explicit and meaningful. However, there will be many other forms and combinations of forms which shall be actualized as long as there is an existing world, and, as we have said, new forms may arise which shall achieve greater perfection than man. The Incarnation is, then, this full and detailed absolute truth of existence, the complete meaning of the world as the sequential order of forms which become actualized in existence by means of the free creativity and contingency of individual ex-

¹Christian orthodoxy and early Christianity certainly did not think of Christ as idealized human personality, but as a divine being. Historically considered, however, it seems that the personality of Jesus had so impressed his disciples that Peter, at least, believed himself to see the Master after his death. Paul, in his account of the resurrection experiences, implies that the experiences of Peter, James the brother of Jesus, and of the brethren were of the same type as his own, and this seems to have been a mystical ecstatic experience. The objective validity of the appearances is, therefore, open to question. It seems, then, that the idealization of the great Jesus by his disciples gave rise to Peter's and then to the subsequent mystical experiences of Jesus.

istences as well as by the general abstract eternal logical structure which is God. Idealized human personality, represented in the Christian religion by Jesus Christ may not be the climax of perfection of Incarnation, but at least it is the greatest perfection so far achieved of which we have knowledge.

In a more philosophical Christianity the concept of the Eternal Christ is more satisfactory than the restriction of the term Christ or human perfection to one individual, great as that individual may be. By the eternal Christ we mean all of those great men who have seen more of God, more of the forms which already are, or which can be realized in existence. The great scientists, for example, have discovered many of the logical forms in nature; the pure mathematicians have discovered many existing as well as many possible logical forms; the great artists have been those sensitive to a wider range of, and more profound insight into, aesthetic forms both actual and possible than most men; the great religious geniuses have been those who, like Jesus of Nazareth, have perceived the immense worth and possibilities for development of human personality, but also have seen its limitations, i.e., its relation to, and dependence upon, a larger whole of being which the mind of man can comprehend only in its general nature. The religious consciousness worships this Reality which its intellect knows but dimly and in part. It feels that it is in the presence of a mystery which it can never fully comprehend. This is what it means by the holiness, the Otherness of God. Jesus says of the divine wisdom, that not a sparrow falls without God's knowledge, and that the hairs of our heads are all numbered. God indeed is in everything and everywhere in the world. The finite mind of man can comprehend but little of the infinite being of God, but those men who have made outstanding contributions to our knowledge of God represent ideal humanity, and can therefore be called the Eternal Christ or the greatest perfection so far achieved in the process of Incarnation.

The Holy Spirit

The Holy Spirit differs only in degree from that portion of Incarnation which we have called the Eternal Christ. The Holy Spirit can be said to "proceed" from both God Transcendent and God Immanent in the Eternal Christ in that the Spirit is brought into self-conscious activity through the stimulation which it re-

ceives by those great Spirits which are represented by idealized humanity, the Eternal Christ. The Holy Spirit is self-conscious reason or the Logos in man which is able to comprehend at least fragmentarily or in its general nature the Logos in nature. To the degree that the human spirit uses the body merely as an instrument and not as an end in itself, and comprehends and unites itself with eternal being, it is Holy Spirit and one with the Father and the Eternal Christ. Holy Spirit, therefore, also is eternal. The Spirit is mystical, for it perceives the eternal comprehensive truth which is the Father and the Incarnation only in its essence or general nature. It knows enough to know that there is an infinitely richer reality of Being to be known, and hence its mystical, noetic feelings, its dark symbolic knowledge, and its emotional quality--love for God. It is that which becomes in the Eternal Christ the discoverer of truth and the ever-burning desire in the hearts of prophets, of scientists, and of philosophers for ever greater truth. It is that prophetic consciousness in man which impels him to bring to self-consciousness the logical forms in nature and to create new forms of his own in both mechanical and fine arts, and new forms of ever-increasing harmony or justice in the social world. Like the Hebrew prophets man feels and knows that he is determined by God, but also that God needs him to determine the definite outcome of events, which but for his activity may be otherwise. Thus it is in the Spirit, as Santayana maintains that the Father or God-Transcendent and the Incarnation or God-Immanent have self-conscious knowledge of one another. The Spirit participates in both the Father and in the Incarnation (including the Eternal Christ which awakens it) and is, therefore, of one substance with them and eternal; for it knows in essence both the general abstract structure of being and the type of thing which the total, perhaps infinite, incarnate truth will be. It is this characteristic of human spirit as Knower which has impressed the greatest thinkers: Plato, Aristotle, Santayana, Cohen, Spinoza, Leibniz, Hegel, Bradley--indeed, all the philosophers except the sceptics and pragmatists. Man as Knower rises beyond the limits of his temporal, finite, material existence and views in essence, if not in the full richness of its detail, the whole meaning of the universe--past, present, and future--in so far as he perceives the essential logical structure, the general character or meaning of reality as a whole. It is in

this sense that the spirit or reason in man is one with the spirit or reason in nature and is thus Holy Spirit and eternal. Man is eternal also in another sense. For as Santayana and Spinoza both maintain, when a man's life is over, the general character or meaning which it has remains an eternal truth. It is the essence or character which it is, and has an indelible meaning in the context of a larger whole of meaning; and finally, no matter in how small a degree, contributes to that whole complex essence of meaning which is the total universe in its absolute truth.

The Spirit in man is lover, however, as well as Knower, for man recognizes that his knowledge of the Absolute is and must remain partial. There must always remain more in God than man can possess in idea. Love, as Hocking maintains, is desire for possession of Idea (the Absolute) as idea (that is, in our comprehension), and because such possession cannot be secured, man will always love God.¹ Such love for God and contemplation of His essence or infinite Being is the subject of mystic prayer and contemplation. But the Holy Spirit in man is a lover of God in yet another sense, which results in the active side of the mystic's life; for it recognizes every other man in his absolute and eternal worth as Spirit also, and loves him as such. It is in this sense, only, that it can be said that God has a personal love for man. Although the philosophical views of the humanists may be found untenable for us, as we found in our discussion of Dewey's metaphysics, the humanists as a group have done much to make it plain that love for man, reverence for the ultimate worth of human personality, can be expressed only by man. God's love for the world was expressed and is still expressed in human form. It is significant that in a religion where God is known primarily as love, God is worshipped essentially as glorified and apotheosized human personality, Jesus Christ, the God-Man. There is great wisdom in this, for what is there at once so full of mystery in its noetic powers, so rich in diverse potentialities for good and evil, so tragically and compelling beautiful as human spirit, creature of time and eternity? God in his absolute and impersonal essence can compel a calm, serene, intellectual love sufficient for many philosophers, but the majority of men desire a more concrete and tangible object of adoration, and one which can return

¹William E. Hocking, The Meaning of God in Human Experience (New Haven: Yale University Press, 1912), pp. 65 f.

love for love. Such an object is given in Christianity by centering all the highest qualities possible for Spirit in Jesus, or more philosophically, in the Eternal Christ. St. Paul, for example, worshipped God in the Lord Jesus Christ whom he passionately loved and adored. This can scarcely be called idolatry, for the human form is a portion of that infinite realm of formal being which is God, and the most marvellous actualized form in so far as we know. Furthermore, that human form which is sensitive to the widest realm of eternal being is most godlike, and Jesus was one of those men most sensitive to the infinity, the power, and absolute wisdom of God. Moreover, Jesus is a personality comprehensible and lovable by men in all stations of life, the lowliest as well as the highest. He can, therefore, point all men to a higher, a divine, ideal.

Sin, Grace, and Salvation

Man as an existent being, like all other existent beings, is grounded in two realms, the material and the spiritual or formal, the former of which is the temporal and irrational and the latter the eternal and rational. In his material nature, therefore, lies his capacity for evil and in his spiritual nature his capacity for good and for eternal life. Now those unselfish potentialities which man can develop and enjoy are those concerned with his spiritual nature, those which can be developed to the benefit of himself and of all others, viz., those concerned with the enjoyment, the discovery, or the creation of forms in the realms of art, science, philosophy, and ethics. But when man lives not for these eternal values but for the material side of his nature, for the lusts of the flesh, for wealth, and for power, he kills the Spirit within himself, and usually thereby also prevents the spirit in many other beings from attaining the development which might have been possible. This demonic tendency of the material side of human nature is sin and sin against the Holy Spirit which it chokes in itself and in others. It is a sin which can be committed by social institutions and by nations as well as by individuals, for institutions and nations also can live for the lusts and powers of the flesh instead of for the life of the Spirit. Such sin is forgivable in its more petty and less harmful instances where the harm done can be overcome, but when the harm done is irretrievable--when human lives become hopelessly crippled

without hope of seeing the light of which every man is in some degree capable--then, such sin can scarcely be forgiven, for the harm done cannot be overcome. Lesser sins can, however, be forgiven by the Spirit which has compassion upon the ignorance, the passions, and general shortcomings and stupidities of fleshly humanity. The Spirit as the society of saints of all time, as the Eternal Christ in the world, represented outwardly in Christianity by the institution called the Church or Body of Christ, administers the sacrament which is the outward symbol of grace or forgiveness of sins to sinners. It welcomes them into Holy Communion with the Eternal Christ as a concrete symbol of forgiveness and compassion. The Communion service also is a symbol of man's eternity, for in this rite he becomes symbolically one with the Eternal Christ. He dies with Christ to the flesh and its lusts and is raised with Christ into eternal spiritual life. The Communion is indeed a fitting symbol of man's actual and potential attainment of eternity. The Church as itself a body is, however, also usually in many ways a sinner, and its members need to be very watchful in order to enable this institution to be a leader in spiritual achievement instead of a conservative, lagging body with a worldly lust for power and wealth.

Man's salvation, then, lies in his concern for eternal values and to the degree that he lives in and for the Spirit, that is, for the larger whole which is God, he, too, is eternal; but in so far as he lives in and for the body, he, too, is temporal and perishes with the body. Thus living or dying we can be eternal. As the Gospel of John declares, the Logos in man, that "light which lighteth each man that cometh into the world," has the capacity for knowledge of eternity, a knowledge brought to clarity through contact with the Eternal Christ and through union with Him; or as Socrates says in somewhat different language: "For I deem that the true votary of philosophy is likely to be misunderstood by other men; they do not perceive that he is always pursuing death and dying..." Man thus through philosophy and religion seeks salvation in other-worldliness, in eternity. Nevertheless, both Christian and Greek realize that a healthy body and some degree of worldly prosperity are essential to the free development of the Spirit in man. Therefore, society must regulate and order its economic and political system to enable each man's life to be free from material wants and enslavement to them, and thus give

him opportunity to share in, and contribute to, the life of the Spirit in its noetic, aesthetic, and moral aspects. What we need is a society in which there will be no poverty, in which there will be facilities and freedom for scientific and scholarly research, and in which art will be encouraged and intelligently enjoyed. This is possible, but at present it seems that we are back-sliding. How far back we shall go and for how long we cannot tell. But it seems possible that some at least of our major attainments in science, art, philosophy, and social ideals will survive somewhere, so that when the long storm subsides we shall not have to begin anew, but might continue and further develop our knowledge, arts, and social ideals, just as our own cultural beginnings built upon foundations laid by the Greeks and Romans. After all, man is very young in comparison with the age of the universe. When we consider the crass ignorance and superstition which must have been all-pervading in our earliest beginnings, we can say that humanity has made considerable progress. Our scientific knowledge at least has grown, but there is, of course, very much more to be discovered especially in the field of human relations where we have made but a bare beginning. Progress for the Spirit towards the attainment of the Kingdom of God may not have any general upward movement, but we may, perhaps, think of it as a spiral movement, backward and forward, but still slowly upward. By up we mean progress in scientific knowledge, philosophy, art, and in the establishment of harmonious, rational social relations which will make such calamities as wars impossible.

Progress in the social field has been slowest, but at least it has now become possible with the help of machines to do away with human drudgery and insecurity. Before our era it was not even possible; and economic insecurity of individuals and of nations is always a major factor in the creation of wars. After this war, if we are intelligent enough, we shall attempt to organize a federal world-state in which every nation will attempt to see that the men of every other nation are provided in so far as is possible with at least a minimum of the necessities of life. However, when we have achieved some of our present ideals, no doubt other evils and other ideals to cure them will develop, so that we shall never suffer from the boredom of Paradise. There will always be an up in social achievement as well as in all other realms of spiritual achievement--art, science, and philosophy--as

long as we are finite beings; and alas, always a down, a backsliding. But from the evidence of general past human history we may at least hope that the movement may be spiral, its general tendency up though never reaching the Kingdom of God, or that full knowledge of eternity which is the Absolute.

A christian doctrine formulated along these lines could serve not only as a skeleton framework for an ecumenical Christianity, but for world religion. It would be entirely comprehensible to the Indian mind. God as the world of form is paralleled in Indian thought by Brahma in his essential nature as Infinite Being, unmanifested for the most part in the temporal world. The principle of Incarnation and its perfection in idealized humanity is also a familiar and beloved idea in Indian religion in the bhakti way of salvation, i.e., devotion to Krishna as Lord. Mahayana Buddhism, prevalent in China and Japan, has a similar symbolism. Buddha in his eternal essence is equivalent to our concept of God, and the earthly Buddhas represent the Eternal Christ or principle of Incarnation. Even Judaism and Mohammedanism could find such a doctrine comprehensible, for if Incarnation were interpreted along naturalistic lines, it would not be objectionable to these religious cults.

We believe that a philosophy of nature founded upon scientific method and its presuppositions will be increasingly more understandable and universally useful in proportion as the point of view which science or naturalism represents becomes more universal. Indeed, human salvation in many ways depends upon the hope that the truly scientific approach to nature and to human social affairs in particular will at some time be universal. As everyone knows, the achievements in certain fields of science are now being used for destruction and exploitation, but this is because scientific method has not been used in all fields. There has been a woeful lack of it in the fields of international, national, racial, and economic relations. Scientific method in these fields would show how nations are dependent upon one another, culturally and economically; the racial equality of men; how a certain minimum standard of living within nations is essential to national and international peace; how unreasonable it is that children of certain families, nations, or races through no merit of their own should have advantages denied to those born in other families, nations, or races; and in general the cumulative irrationalities in

our world social order. Scientific method must eventually be used here also or it will continue to be used as it is now being used merely as a cunning instrument for the destruction of man, body and spirit, on a grand scale, instead of as an instrument for his bodily and spiritual growth. Scientific method and its great achievements must be used for the benefit of all men. It must become universal as a method in all fields of human endeavour, theoretical and practical. It seems that we are entering upon an era of world-culture that will use this method and its achievements as basic; therefore, a philosophy of religion which will be universally understood, one which can hope to be comprehensible in terms of the greatest world-cultures and create understanding and sympathy among religious groups instead of animosity, ought to base itself upon it.

